

Amendments to the Specification:

Please replace the paragraph beginning at page 3, line 15, with the following amended paragraph:

Several proposals for addressing this problem can be found in issued patents. US Patent No. 5,858,568 provides for off-board use of the electricity generated from at least one stationary fuel cell powered vehicle. US Patent No. 5,767,584 and US Patent No. 6,107,691 both disclose inventions for generating electrical power from multiple stationary fuel cell powered vehicles parked in a parking lot. All of these inventions are based on the realization that a fuel cell power unit of a car represents a significant power source, and unlike a conventional combustion engine, can efficiently generate electrical power that can be readily taken off the vehicle for use elsewhere. Furthermore, a fuel cell can generate electricity virtually free of pollution, whereas an internal combustion engines produces greenhouse gases which contributes to acid rain. Moreover, unlike conventional gas engines, the wear and tear from additional use of a fuel cell is quite small. Thus with suitable financial incentives, it is believed that vehicle owners would effectively be prepared to rent out the power unit of a vehicle simply as an electrical generator, when the vehicle is not in use. Payments made for use of a vehicle's fuel cell power unit effectively provides the subsidies necessary to justify the higher initial capital costs of the fuel cell powered vehicle. A further consideration is that fuel cell engines are powerful, typically in the range of 20kw to 40kw, so that the power of the order of Megawatts would be generated from a small number of vehicles. To enable power to be recovered from a large number of vehicles, the intention is to provide a suitable facility at a parking lot or the like.

Please replace the paragraph beginning at page 17, line 6, with the following amended paragraph:

In accordance with one aspect of the present invention, there is provided a system for enabling the real time buying and selling of electrical power between a fuel cell powered vehicle and a consumer of electricity, the system comprising:

vehicle connections arranged to cooperate with the vehicle for the supply of a fuel to the vehicle and for transfer of electricity to and from the vehicle;

a calculating device for determining the current cost of fuel and price paid for generating electricity using data and information received by the calculating device via a network of a network communication system; and based at least on a cost of fuel and a price paid for generating electricity, for determining whether to make the fuel cell powered vehicle available for generation of electricity by performing one or more calculations based on the data and information received via the network; and

a controller for regulating the process of consumption of fuel by the vehicle and the generation of electricity by the vehicle based on the determining by the calculating device;

wherein, when fuel is consumed by the vehicle and electricity is generated by the vehicle, the calculating device further collects data on the quantity of fuel consumed and the amount of electricity generated, to calculate the cost of the fuel and the value of the electricity generated, and to provide a debit charge for the cost of fuel consumed and a credit charge for the value of electricity generated, thereby accounting for fuel consumed and electricity generated by the vehicle; and wherein the network communication system provides real time communication between at least the fuel cell powered vehicle and the consumer of electricity to facilitate the real time buying and selling of electrical power, method enabling the real time buying and selling of electrical power between a fuel cell powered vehicle and a consumer of electricity, the method comprising:

- (i) providing connections to the vehicle for the supply of a fuel and for transfer of electricity;
- (ii) determining the current cost of fuel and price paid for generating electricity;

- (iii) based at least on the cost of fuel and price paid for generating electricity, determining whether to make the fuel cell powered vehicle available for generation of electricity; and
- (iv) when fuel is consumed by the vehicle and electricity generated by the vehicle, collecting data on the quantity of fuel consumed and amount of electricity generated, calculating the cost of the fuel and the value of the electricity generated, providing a debit charge for the cost of fuel consumed and a credit charge for the value of electricity generated.

Please replace the paragraph beginning at page 17, line 22, with the following amended paragraph:

In accordance with a second aspect of the present invention, there is provided a system for enabling the real time buying and selling of electrical power between a vehicle having a fuel cell power unit and an energy service provider utilizing a network of a network communication system adapted for providing real time communication between at least the vehicle and the energy service provider to facilitate the real time buying and selling of electrical power, the system comprising:

connections to at least one vehicle for the supply of a fuel and for transfer of electricity;

a controller on each vehicle for handing over control of the fuel cell power unit of each respective vehicle to the energy service provider, to enable the energy service provider to make determinations of when to operate the fuel cell power unit of each vehicle and to set the load level for each fuel cell power unit using data and information received via said network;

and wherein each controller is further adapted to controls the process of consumption of fuel by each respective vehicle and the generation of electricity by the respective vehicle based on the determinations made, and to collect data on the quantity of fuel consumed and amounts of electricity generated, when fuel is consumed by each respective vehicle and electricity generated by each respective vehicle, and for calculating the cost of the fuel and the value of the electricity generated, thereby accounting for fuel consumed and electricity generated by

the respective vehicle method for enabling the real time buying and selling of electrical power between a vehicle having a fuel cell power unit and an energy service provider, the method comprising:

- (i) providing connections to at least one vehicle for the supply of a fuel and for transfer of electricity;
- (ii) handing over control of the fuel cell power unit of each vehicle to an energy service provider;
- (iii) the energy service provider determining when to operate the fuel cell power unit of each vehicle and setting the load level for each fuel cell power unit; and
- (iv) when fuel is consumed by each vehicle and electricity generated by each vehicle, collecting data on the quantity of fuel consumed and amounts of electricity generated, and calculating the cost of the fuel and the value of the electricity generated.

Please replace the paragraph beginning at page 18, line 8, with the following amended paragraph:

In accordance with a third aspect of the present invention, there is provided a system of generating electrical power utilizing fuel cell power units of vehicles, the system comprising:

connections to a plurality of fuel cell powered vehicle for the supply of a fuel and for transfer of electricity from the vehicle;

a fuel supply associated with each vehicle and a fuel controller to measure and charge for fuel used by each vehicle;

an electricity receiving device for receiving electricity generated by each vehicle, wherein the electricity received is paid for at a first, interruptible rate; and

an aggregation unit for aggregating the electricity generated by the plurality of vehicles, wherein the aggregated electricity is resold as an uninterruptible electrical supply at a higher, uninterruptible rate. method of generating electrical power utilizing fuel cell power units of vehicles, the method comprising:

- (1) ~~providing connections to a plurality of fuel cell powered vehicle for the supply of a fuel and for transfer of electricity from the vehicle;~~
- (2) ~~supplying fuel to each vehicle and charging for fuel used by each vehicle;~~
- (3) ~~receiving electricity generated by each vehicle and paying for the electricity at a first, interruptible rate; and~~
- (4) ~~aggregating the electricity generated by the plurality of vehicles, and reselling the aggregated electricity as an uninterrupted electrical supply at a higher, uninterrupted rate.~~

Please replace the paragraph beginning at page 18, line 20, with the following amended paragraph:

In accordance with a fourth aspect of the present invention, there is provided a system of generating electricity from the fuel cell power unit of a fuel cell powered vehicle, the system comprising;

a vehicle having a fuel supply;

vehicle connections over which electricity generated in the fuel cell power unit is transferred from the vehicle;

an electricity generation system coupled to the vehicle by the vehicle connections, wherein the electricity generation system is adapted to divides the generated electricity into first and second portions, and permit the first portion of generated electricity to be consumed locally,

to transmit and sell the second portion of generated electricity to an electricity transmission and distribution grid; and

to meter the net amount of electricity transmitted to the transmission and distribution grid, or taken from the transmission and distribution grid, in a set time period.

~~method of generating electricity from the fuel cell power unit of a fuel cell powered vehicle. The method comprising;~~

- (1) ~~supplying fuel to the vehicle;~~
- (2) ~~generating electricity in the fuel cell power unit and transferring the electricity from the vehicle;~~

- (3) ~~dividing the generated electricity into first and second portions, and consuming the first portion of generated electricity locally;~~
- (4) ~~transmitting and selling the second portion of generated electricity to an electricity transmission and distribution grid; and~~
- (5) ~~metering the net amount of electricity transmitted to the transmission and distribution grid, or taken from the transmission and distribution grid, in a set time period.~~

Please replace the paragraph beginning at page 19, line 20, with the following amended paragraph:

In accordance with a fifth aspect of the present invention, there is provided a system of generating electrical power from a vehicle including a fuel cell power unit and financing the cost of the vehicle, the system comprising:

a fuel cell powered vehicle operated by the vehicle operator;
a controller for the vehicle enabling the vehicle operator to enter into a contract providing for at least one of an initial lump sum payment and regular payments to cover at least part of the cost of the vehicle;

wherein the contract provides for the operator to commit to parking the vehicle at selected docking stations for generation of electricity;

a fuel supply for supplying fuel to the vehicle when the vehicle is parked at one of the selected docking stations;

wherein electricity is generated from the fuel cell power unit of the vehicle for sale when the vehicle is parked, to generate income generated from the sale of electricity to cover part of the cost of the vehicle. method comprising:

- (1) ~~providing a fuel cell-powered vehicle to a vehicle operator;~~
- (2) ~~having the vehicle operator enter into a contract providing for at least one of an initial lump sum payment and regular payments to cover at least part of the cost of the vehicle;~~
- (3) ~~providing in the contract for the operator to commit to parking the vehicle at selected docking stations for generation of electricity;~~

(4) ~~when the vehicle is parked at one of said selected docking stations, supplying fuel to a vehicle, generating electricity from the fuel cell power unit of the vehicle and selling the electricity; and~~

(5) ~~utilizing income generated from sale of electricity to cover part of the cost of the vehicle.~~

Please add the following new paragraphs beginning at page 19, line 18:

In accordance with a sixth aspect of the present invention, there is provided a network communication system for enabling the real time buying and selling of electrical power between a plurality of vehicles, each having a fuel cell power unit and an energy service provider, the system comprising:

a network communication system for providing real time communication between each vehicle and the energy service provider to facilitate the real time buying and selling of electrical power;

a plurality of docking stations, each including connections for at least one vehicle for the supply of a fuel and for transfer of electricity;

a controller on each vehicle for handing over control of the fuel cell power unit of each respective vehicle to the energy service provider, to enable the energy service provider to make determinations of when to operate the fuel cell power unit of each vehicle and to set the load level for each fuel cell power unit using data and information received via said network;

comprising:

a network to which a plurality of vehicles and a plurality of docking stations are coupled;

wherein each of the plurality of vehicles comprises a fuel cell unit;

wherein each of said plurality of vehicles and said plurality of docking stations is associated with a unique digital identifier, the unique digital identifier of each vehicle being required for control of the controller thereof; and

wherein the identifier facilitates identifying the respective vehicle or docking station in said network.

In accordance with a seventh aspect of the present invention, there is provided a brokerage system for trading electricity, wherein said electricity is generated by one or more fuel cell units, the system comprising:

at least one vehicle being a vendor of electricity, wherein said one or more fuel cell units are operable in said vehicle to generate electricity, said vehicle including an interface enabling one of a vehicle owner and a vehicle operator to negotiate a contract for electricity, said electricity being supplied by said vehicle when coupled to a docking station; and

an energy service provider being a purchaser of electricity, wherein said energy service provider obtains said electricity from said vehicle via said docking station and purchases said obtained electricity in accordance with said contract.

In accordance with an eighth aspect of the present invention, there is provided a method for trading electricity, the method comprising:

negotiating a contract for electricity, wherein said electricity is generated by one or more fuel cell units, wherein said one or more fuel cell units are operable in at least one vehicle to generate electricity, and wherein said electricity is supplied by said vehicle when coupled to a docking station;

obtaining said electricity from said vehicle via said docking station; and
purchasing said obtained electricity in accordance with said contract.

Please replace the paragraph beginning at page 24, line 11, with the following amended paragraph:

Still referring to Figure 2, there are different types of agreements possible between the system participants. For example, when the fuel gas supplier 102, the fuel cell powered vehicle 104, and the energy service provider 108 all agree on a cost of fuel, a price paid for generating electricity, and a price paid for the supply of electricity, this can be set out in a multi-party agreement, or in separate agreements between the parties. These types of agreements between the system participants become part of the stored information on the master database.

Please replace the paragraph beginning at page 40, line 26, with the following amended paragraph:

Another possibility is an aggregated transaction. In this case, a number of car owners are aggregated by any one of an energy service provider, a parking lot owner, facility owner, a leasing company, a property company or another party, here designated the aggregator. In the case of an energy service provider, aggregation can be on the order of a handful of vehicles to thousands of vehicles. In the case of a parking lot owner, the aggregation would be of all vehicles parked at a common facility, or a group of associated facilities. In the case of a leasing company, the physical location of the vehicle will be less critical, although commonly it is expected that the leasing company may require vehicles to be parked at certain locations, such as public parking facilities, where the leasing company has made prior contractual arrangements concerning costs. The aggregator can take the risk of commodity transactions, much like the energy broker(s) did in the fully brokered transaction. In this fashion, the aggregator buys fuel and sells electricity into the open market. The aggregator can divert electricity generation to an adjacent facility, as the facility's primary source of electricity. For example, large office buildings and the like commonly have a parking lot associated with them, and electricity generated in that parking lot can be used as electrical power for the building, thus avoiding payments to intermediaries, such as transmission and distribution companies. The aggregator can send electricity to another facility associated with a particular docking station and/or a transmission grid depending upon market conditions.